**IT Applications Unit 3  
Chp 3: Networked Information Systems**

**Their size and architecture**

**Networks**

1. What is a network?  
   A network connects computers together so they can share data, information and resources such as printers, plotters, internet access, servers, modems and scanners.

**Advantages of networks**

1. Resource sharing  
   **a.** Internet connection  
   Allows all people in a company to access only one internet. It saves the company from paying for multiple internets. If there are many users using the internet the connection needs to be higher but it still is cheaper than allow each user their own internet.  
   **b.** Printers  
   Printers connected on a network drop the amount of time wasted and allows for more work to be down. It allows users to print from their own computers instead of having to print off one elected computer.  
   **c.** Software  
   A site licence or network licence is offered from most software manufactures. It allows multiple users in an organisation to simultaneously use the software.  
   **d.** Other resources  
   Other resources that can be connected to a network or shared through connection to a computer include, CD-ROM towers, fax machines, network storage and directory services
2. Remote services  
   **a**. What is a B2B network?  
   B2B or business-to-business is where businesses are connected directly to a part of the network of another business.  
   **b**. What is an extranet?  
   An extranet is a private network that operates using Internet protocols and the public telephone system. It allows businesses to network with suppliers, vendors, partners, customers or other businesses to share information or services.
3. Facilitate communication  
   Allows people to communicate easily within the organisation or with people outside the organisation through the use of internet. Examples of communication through a network are; email, chat rooms, messaging, telephony and videoconferencing.
4. Data and information sharing  
   Being able to access information/data via a network ensures that it is available promptly and that it’s accurate.
5. Saving of money  
   Money is saved as time is saved, less employees are needed when information can be quickly and easily accessed.

**Their size and architecture**

1. Describe a LAN  
   A LAN or local area network is a network that connects computers and devices within close geographical proximity (eg; office building, uni, school or home)
2. What is a wireless LAN?  
   A wireless LAN is where radio waves, satellite communications, microwave or infra-red media is used to transmit signals between nodes (computer or device)
3. Describe a WAN.

A wide area network id s network where communications are carried by a medium owned by someone else who is not part of the organisation whose data is being transmitted. Transmission media includes microwaves, fibre optic, telephone lines and satellite.

**Network architecture**

1. What does computer architecture refer to?  
   It refers to how they are connected to a network.

**Client/server Network**

1. Describe the nature of this network  
   A client requests data or files, a server shares or sends files to the clients as they are asked for.
2. What is meant by multi-tasking?  
   Multi-tasking is where you are able to process instructions from more than one program at the same time.
3. List the different types of servers.  
   -File servers  
   -Print servers  
   -Database servers  
   -Web servers  
   -Domain name servers  
   -Proxy servers  
   -Back-up servers  
   -Dynamic host configuration protocol servers  
   -Primary domain controller servers.

**Peer-to-peer Network**

1. Describe the nature of this type of network  
   Peer-to-peer network allows all devices to be able to share files and resources.
2. What is a ‘peer’?  
   A peer is someone on the same level as you.
3. What are the limitations of this type of network  
   - Difficulty locating which resource is available on which machine and waiting for it to be delivered  
   -Having to wait for a gap in the network traffic